



SR-68, BANGERTER HIGHWAY TO SARATOGA SPRINGS UTAH AND SALT LAKE COUNTIES, UTAH

EXECUTIVE SUMMARY

PROJECT OVERVIEW

This Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) and is sponsored by the Utah Department of Transportation (UDOT) and the Federal Highway Administration (FHWA). It presents the analyses on how proposed roadway improvements on SR-68 from Bangerter Highway to the future Pony Express Parkway in Saratoga Springs will affect the natural and built environments. The EA discloses information about existing resources and identifies potential effects resulting from the Proposed Action. It serves as documentation of the environmental review process including public and agency input on the Proposed Action, the recommended design for roadway improvements, potential effects and recommended mitigation measures.

The Proposed Action on SR-68 is located in northern Utah County and southern Salt Lake County. The 10.3 mile Proposed Action begins just south of the future Pony Express Parkway in Saratoga Springs, milepost (MP) 30.5, and extends north to Bangerter Highway at MP 40.8. It serves the residential and commercial traffic of the urbanized cities of Saratoga Springs, Eagle Mountain, Lehi, Bluffdale and surrounding areas.

PURPOSE AND NEED

Purpose

The purpose of this Proposed Action is to:

- Increase SR-68 capacity to accommodate existing and 2030 future traffic and reduce congestion along the project corridor; and
- Increase transportation safety for all users by improving SR-68 in accordance with current design standards, adding bicycle lanes and shoulders, improving intersections; constructing medians in some locations, and improving wildlife corridor connectivity.

Need

The need for this Proposed Action is based on the following factors:

- Predicted 2030 peak hour traffic demand exceeds available transportation capacity;
- SR-68 must provide a safe transportation facility for existing commercial and residential development; and
- Currently bicycle and pedestrian facilities are limited and are desired to accommodate users.



Objectives

Due to the anticipated problems caused by forecast traffic volumes and crashes, UDOT proposes to make roadway improvements on SR-68 within the Proposed Action study area limits. The objectives for these improvements include the following:

- Improve connectivity between existing and proposed transportation arterials and highways;
- Provide a transportation infrastructure that meets current roadway standards and will be an asset to the community;
- Provide a transportation facility that operates at an acceptable level of service (LOS) and meets UDOT's goal of LOS D;
- Maximize long-term roadway capacity by managing access concurrent with UDOT policies and existing and planned land uses; and
- Improve emergency response time and availability of emergency response teams.

ALTERNATIVES

A total of seven alternatives were considered as possible solutions to address the transportation need, including:

- No Build;
- Transportation System Management (TSM) and Transportation Demand Management (TDM);
- Transit Only;
- Combination of TSM/TDM, Transit and Three Lane Alternatives;
- Seven Lane Alternative, three northbound and three southbound travel lanes with a center turn lane;
- Three Lane Alternative, adding only a center turn lane; and
- Five Lane Alternative, five lanes with two northbound and two southbound travel lanes with a center turn lane.

The alternatives considered were analyzed through a screening process which evaluated their ability to meet the project's purpose and need and objectives. For the mainline, evaluation of alternatives relied on a screening level analysis of projected roadway LOS based on daily traffic volumes.

Alternatives that would likely result in an unacceptable LOS E or F for the majority of the corridor were eliminated from further consideration. Alternatives that resulted in a LOS D or better, but that were not viewed as favorable, were eliminated if other alternatives with fewer environmental impacts resulted in acceptable levels of service.

Based on the analysis and comparison of the Project options, the Five Lane Alternative will provide adequate capacity to reduce congestion to an acceptable level. Roadway improvements combined with congestion relief will enhance safety on the roadway. This



alternative was screened against environmental concerns associated with potential right-of-way and relocation impacts to adjacent properties. Environmental screening determined that the proposed five-lane footprint would result in lower environmental impacts than the larger, seven-lane footprint considered above. Therefore, the five-lane alternative will be studied in the Environmental Assessment and is the Proposed Action.

DESCRIPTION OF THE PROPOSED ACTION

The Proposed Action consists of widening SR-68 from two/three lanes to five lanes with two through lanes in each direction and a center turn lane. It extends 10.3 miles beginning just south of the future Pony Express Parkway intersection with SR-68 (MP 30.5) in Saratoga Springs and ending at Bangerter Highway in Bluffdale (MP 40.8). Principle features of the Proposed Action are described below:

The roadway cross section includes two general purpose lanes in each direction and a center lane to accommodate left turn movements. Each side of the roadway will have shoulders, bicycle lane within the shoulder, curb and gutter and a park strip with sidewalk along the majority of the Project. Sidewalks will not be constructed as part of the project in Saratoga Springs, where developers are required to construct them.

In the urban area of Bluffdale, the roadway surface grade and curves will be designed and constructed to meet current AASHTO design standards for a 50 mph design speed. Outside of Bluffdale the roadway will be designed for 60 mph design speed. In addition, signage will be improved and cross-street and driveway accesses will be modified and/or controlled to improve the long-term use of the roadway.

Wildlife crossings will be constructed at three locations along the Project corridor. The crossings will include fencing to direct wildlife to these under crossings. For each of the wildlife crossings, fencing will be placed adjacent to the ends of each structure and run along the potential right-of-way line on both sides of SR-68.

AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND MITIGATION

Table ES-1 summarizes the existing conditions, potential effects, and recommended mitigation measures for the proposed SR-68 Corridor Project. Table ES-2 summarizes the potential temporary construction related impacts and mitigation measures. For construction, there will be no impacts for the No Build Alternative and is not included in the table.



TABLE ES-1, SUMMARY OF NO BUILD AND PROPOSED ACTION ALTERNATIVE, ENVIRONMENTAL CONSEQUENCES, AND MITIGATION

Environmental Issues and Description	Environmental Consequences		Mitigation
	No Build	Proposed Action	
Land Use Existing land uses along the project corridor include rural residential, institutional (military), agricultural, business/commercial, and undeveloped. Within Saratoga Springs, the main land use is residential, agricultural, and commercial. The main commercial area is at the intersection of SR-68 and SR-73. Camp Williams, operated by the Utah National Guard, is located at the Utah and Salt Lake County border on both sides of SR-68. The land uses in Bluffdale are mainly residential with some commercial.	No impact.	No impact.	None.
Farmland Farmlands, including Prime and Unique and Agricultural Protection Areas, are located along the corridor. Farmlands are irrigated by a system of canals and ditches.	No impact.	A total of 20 acres of farmland will be converted to non-agricultural uses (roadway). A total of 6 acres of Prime and Unique farmland and 14 Agricultural Protection Areas will be impacted. No farmland areas will be divided; they will remain operational and economically productive.	Access will be maintained to all farmlands along the corridor. The irrigation features and structures impacted will be restored. In addition, a new signal will be added at either 10000 North (future 2100 North) or at 10400 North to provide a safer crossing for farming operations on the east and west sides of SR-68.



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Social Resources Social resources within the project study area include recreation resources, public facilities, utilities and canals, Environmental Justice, right-of-way and relocations.	No impact.	<u>Recreation Resources</u> The Proposed Action will not impact existing or planned recreation resources. <u>Public Facilities</u> The Proposed Action will have no long-term impacts to public facilities (Camp Williams, Bluffdale City Cemetery and Public Works Shop). <u>Utilities and Canals</u> The Proposed Action will impact a number of utilities that exist within the roadway prism. Also, the Saratoga Canal, Utah Distributing Canal, Provo Reservoir Canal, and Utah and Salt Lake Canal, will be crossed. About 850 feet of the South Jordan canal will be piped. <u>Environmental Justice</u> The Proposed Action will not disproportionately impact minority or low-income populations. <u>Right-of Way and Relocations</u> The Proposed Action will require the relocation of four residences (another residence and business is pending for a total of six). A total of 161 parcels will be impacted along the project corridor resulting in 40.9 acres of right-of-way.	None. Wildlife crossing #3 will be designed to allow for a future trail crossing. None. <u>Utilities and Canals</u> Utilities that need to be relocated will be identified during design. UDOT will coordinate with the various utility companies to ensure that they are restored and remain operational as part of the Proposed Action. All canals that will be crossed by the Proposed Action will be coordinated with during the design phase. <u>Environmental Justice</u> None. <u>Right-of-Way and Relocations</u> All property will be acquired within state and local procedures and policies. The Uniform Relocations Assistance and Real Property Acquisition Policies Act will be followed during the right-of-way process of this project.



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Economics Utah and Salt Lake Counties have experienced a strong job growth and very low unemployment. Residential and commercial development has been strong within the project corridor. These trends are expected to continue into the future.	No impact.	No impact.	None.
Pedestrian and Bicyclist Considerations The project corridor is used by bicycle enthusiasts; no bike lanes exist along SR-68 within the project corridor. Bicyclists use the narrow shoulder where available or are forced to use the travel lane. Sidewalks are intermittent within both Saratoga Springs and Bluffdale.	No impact. However, no bike lanes would be added for this alternative. Sidewalks would not be added. Bicycle and pedestrian safety conditions would not be improved.	A five foot bike lane will be added along the shoulders of the as part of the Proposed Action. Also, sidewalks will be constructed within Bluffdale. Sidewalks are anticipated in Saratoga Springs when development occurs.	None. Wildlife crossing #3 will be designed to allow for a future trail crossing.
Air Quality The Proposed Action is consistent with the regional planning efforts of the Wasatch Front Regional Council and the Mountainland Association of Government long range transportation plan.	Traffic congestion will increase which may have an adverse affect on air quality.	No impact.	None.



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Noise FHWA's Traffic Noise Model was used to predict existing, no build (year 2030), and future year 2030 noise levels along the project corridor. The main noise source along the corridor is traffic noise. UDOT's noise policy directs how noise impacts and abatement are to be determined.	<p>No impact. However, noise levels will continue to increase as the number of vehicles using SR-68 increases.</p> <p>A total of 80 receptors (most typically residences) of the 120 impacted receptors already have a noise level above UDOT's criteria for a noise impact. In other words, without any improvements along the corridor and with current traffic volumes, 67 percent of the sensitive noise receivers are above the noise criteria (65 dBA).</p>	<p>A total of 120 noise impacts at sensitive receivers will occur for the Proposed Action; 46 in Saratoga Springs which includes two 12-unit condos (24 impacts total) and 74 noise impacts in Bluffdale. These impacts include six commercial properties (above 70 dBA), the Bluffdale City Cemetery, and a church in Bluffdale. None of the impacts are above 74 dBA and no receiver had an absolute increase greater than 9 dBA (difference between existing and Proposed Action noise levels).</p>	<p>Noise restriction signs have been placed along SR-68 in Bluffdale. These signs state a restriction on the use of compression brakes to help lower traffic noise levels. They will be replaced during the construction of the Proposed Action. Noise walls were evaluated along the project corridor. To be effective, noise walls must reduce noise levels by at least 5 dBA for the majority of impacted receivers and be cost effective. A balloting effort for impacted residential for effective walls took place where noise walls are considered effective.</p> <p><u>Saratoga Springs</u> One noise wall will be constructed at the Dalmore Meadows subdivision. This wall will be a minimum of eight feet high and 800 feet long (with a break between Dalmore Meadow Drive). The balloting process identified a majority of the front-row and impacted receivers want this noise wall. Of the 12 front row and impacted receivers, 9 responded in the positive for this noise wall.</p> <p><u>Bluffdale</u> Noise walls were also evaluated in Bluffdale. However, no location in Bluffdale along SR-68 is considered reasonable, feasible, and cost effective. The number of accesses onto SR-68 limits the length and effectiveness of noise walls.</p>



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	No Build	Proposed Action	
Geology, Soils, and Topography The project study area runs along the western edge of northern Utah and southern Salt Lake Counties. The areas topography ranges from steep to shallow.	No impact.	No impact.	None.
Floodplains Only one floodplain exists near the project study area. It is called Wood Hollow drainage and originates in the Traverse Mountains in Camp Williams. This floodplain is located west of the project corridor and does not cross over to the east side.	No impact.	No impact.	None.
Water Quality The only open water sources along the project corridor are associated with canals and ditches. Groundwater elevations vary in the project area. There are no well protection zones along the corridor.	No impact.	No impact.	As part of the construction, detention basins will be constructed to help filter and clean storm water runoff before it is discharged to a receiving water (usually a canal or ditch). These detention basins have been sized based on preliminary design; they are shown in Appendix A.



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Wetlands and Waters of the U.S. Only one wetland area is located along the project corridor. It is found along the banks of the Provo Reservoir Canal and is approximately 0.17 acres in size. The project corridor crosses or is located near seven Waters of the U.S. These include an Unnamed Irrigation Ditch, Utah Distributing Canal (two locations), Provo Reservoir Canal (two locations), Beef Hollow, Utah and Salt Lake Canal, South Jordan Canal (located adjacent to SR-68 – does not cross the roadway), and Rose Creek.	No impact.	The Proposed Action will impact approximately 0.03 acres of the wetland area. A wildlife crossing will be constructed at this location which will impact the wetland. All the Waters of the U.S. (except the Unnamed Irrigation Ditch) will be impacted by the Proposed Action.	A Clean Water Act Section 404 permit will be obtained prior to the commencement of construction activities. Mitigation may include in-lieu fee and/or revegetation of canal and disturbed areas. UDOT will continue to coordinate with the Army Corps of Engineers.
Wildlife and Utah Sensitive Species There is a high rate of wildlife crashes along the project corridor. Deer trying to reach the Jordan River from Camp Williams and other undeveloped areas to the west need to cross SR-68 to reach their main water source, the Jordan River.	No impact.	Three wildlife crossings will be constructed as part of the Proposed Action. These crossings will include wildlife fencing to help channel deer into them. These crossings will help to improve safety along SR-68 and reduce the number of crashes.	Three wildlife crossings are included as part of the Proposed Action.
Threatened and Endangered Species Bald eagles are the only threatened and endangered species that have the potential to occur along the project corridor; none were identified within the project corridor.	No impact.	There will be no effect on T&E species.	None.



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Invasive Species Invasive weed species have the potential to exist along the project corridor in undeveloped areas. They may be spread as part of the construction activities.	No impact.	No impact.	UDOT Special Provision 02945S – Invasive Weed Control will be used as part of the construction phase of this project. The Contractor will be required to use this specification to minimize the potential to spread invasive weed species.
Historic and Archaeological Resources Along the 10.3 mile corridor, there are 22 historic and archaeological resources. These include canal crossings, historic houses, and archaeological sites.	No impact.	The Proposed Action will have an Adverse Effect on four historic houses; all in Bluffdale. It will have a No Adverse Effect on any of the canal crossings.	A Memorandum of Agreement will be executed between UDOT, FHWA, and SHPO that will include mitigation measures. An Intensive Level Survey will be conducted at the four Adverse Effect historic properties. This will include documentation of the structures with maps and photographs.
Hazardous Waste Two areas have been identified as having underground storage tanks. These are at the LDS Church Welfare Service site in Lehi and the Maverick County Store (#266) in Bluffdale.	No impact.	No impact.	None. The Contractor will be required to follow UDOT Standard Specification 01355 – Environmental Protection.
Visual Quality The project area is located in a rural area that is rapidly being urbanized with residential and commercial development. The views in the area are of mountains to the west and east.	No impact.	No impact.	None.



TABLE ES-2, SUMMARY OF POTENTIAL CONSTRUCTION IMPACTS AND MITIGATION

Impacts	Proposed Action	Mitigation
Traffic and Access	<p>Short term and temporary impacts to motorists and pedestrians from construction traffic delays.</p> <p>It is unknown if any detours will be required at this time.</p> <p>Temporary impact to access to and from adjacent properties.</p> <p>Access and/or parking may be modified during construction.</p>	<p>The Contractor will be required to follow the Manual on Uniform Traffic Control Devices.</p> <p>Construction activities will be planned to minimize traffic detours, congestion, and delays.</p> <p>Advance notice will be given for all road closures (see public information and coordination), traffic detours, congestion/delays, and reduced use of the existing roadway as practicable.</p> <p>Property and business owners will be able to report construction problems and should be able to expect resolution in a timely manner.</p> <p>Access to businesses, customer parking, and residences will be maintained throughout construction.</p>
Noise	<p>There may be a temporary increase in noise from construction activity.</p>	<p>Construction noise impacts are considered temporary and will be minimized through contractors adhering to UDOT Standard Specifications for noise and vibration control (UDOT Standard Specification 01355 – Environmental Protection, subsection 1.8 Noise and Vibration Control). The Contractor will adhere to local jurisdiction laws and regulations regarding construction noise.</p>
Air Quality	<p>Construction activities, especially associated with excavation, will temporarily impact air quality by increased amounts of larger dust particles. Odors may be present during paving.</p>	<p>The Contractor will be required to follow UDOT's Standard Specification 01572 - Dust Control and Watering.</p>
Farmlands	<p>Construction activities could disrupt farming operations. These impacts would be temporary.</p>	<p>The Contractor will be required to maintain access to farmlands during construction. Also, see Utilities and Canals for irrigation issues.</p>



TABLE ES-2, SUMMARY OF POTENTIAL CONSTRUCTION IMPACTS AND MITIGATION

Impacts	Proposed Action	Mitigation
Water Quality	There is the potential to impact surface water quality from sediment and erosion during construction. There is a potential to impact groundwater if there are spills or leakage of contaminants materials during construction.	<p>Disturbed areas will be reseeded and planted with native vegetation as soon as feasible.</p> <p>Best Management Practices (BMPs) will be used to minimize storm water runoff effects.</p> <p>Irrigation features will be maintained during construction so that farming dependent upon them will continue to be economically viable.</p> <p>A Storm Water Pollution Prevention Plan will be prepared prior to construction activities. This plan is designed to minimize the storm water impacts to receiving waters during construction.</p>
Utilities and Canals	Construction will require the relocation and/or re-construction of several utilities.	<p>Advance notice will be given of all anticipated disruptions to utility service. UDOT will coordinate with the various utility companies during the design phase of this project. The Contractor will be required to coordinate with the utility companies and irrigation companies prior to any disruptions.</p> <p>Water carried by the irrigation facilities will continue to reach farmers during construction. BMPs will be used to maintain the quality of the water within the irrigation facilities during construction.</p>
Geology, Soils, and Topography	The construction activities will disturb soils along the project corridor. These will be temporary impacts.	The Contractor will be required to revegetate disturbed areas as soon as feasible to minimize soil erosion.
Hazardous Materials	Construction activities could result in accidental spill of hazardous materials, particularly petroleum products. Contractor may encounter hazardous materials during construction not previously identified.	The contractor will be required to contain all areas used for refueling. Upon discovery of hazardous materials during construction, the contractor will be required to notify UDOT immediately and cease all construction related activities in the area. The Contractor will be required to follow UDOT Standard Specification 01355 – Environmental Protection.



TABLE ES-2, SUMMARY OF POTENTIAL CONSTRUCTION IMPACTS AND MITIGATION

Impacts	Proposed Action	Mitigation
Invasive Species	The potential exists for invasive plant species to be introduced and propagated in the Proposed Action roadway and adjacent right-of-way.	The Contractor will be required to follow UDOT's Special Provision 02924S – Invasive Weed Control, during construction activities. The BMPs listed in this specification include washing equipment (i.e. earth movers, graders, trucks) prior to their use and applying an herbicide along the project corridor prior to construction to control the spreading of these noxious species. Also, disturbed areas will be revegetated with native, non-invasive species as soon as feasible.
Public Information and Coordination	N/A	A public information plan will be developed and implemented as part of the construction phase of this project. The plan may include regular updates to the local jurisdictions general public, notification to businesses of construction schedules and anticipated inconveniences, coordination with emergency response personnel.
Construction Work Hours		Construction work hours will be coordinated with the local jurisdiction and UDOT.



PUBLIC INVOLVEMENT

NEPA requires effective and ongoing public participation during the development of an environmental document. Stakeholders included representatives of the local governments (Saratoga Springs, Bluffdale, Eagle Mountain, and Lehi), the Utah National Guard representing Camp Williams, the LDS Church, and the general public. Stakeholders were invited to participate in the process.

The scoping period for the SR-68 Project began with the scoping public meetings that were held August 9 and 10, 2006, in Saratoga Springs and in Bluffdale, respectively. Presentations were given prior to the public meetings to Camp Williams' officials and the city councils of Lehi, Saratoga Springs, Bluffdale, and Eagle Mountain. These meetings occurred August 9, July 11, 18, and 25, and August 1, 2006, respectively. Other more informal meetings were convened with resource agency staff and LDS Church Property Management staff. The Salt Lake Bicycle Club requested a presentation that was given September 7, 2006.

Comments were addressed and responses provided as appropriate. Comments received during the NEPA process were used to identify issues for scoping and were considered in the development of the Proposed Action.

The public comment period on the EA began on April 11, 2007 and ended on May 11, 2007. A total of 27 comments on the EA were received. Comments were received by email, through the comment forms collected at the meeting and through comments taken by the court reporter in attendance at the hearing.

Two public hearings were held. The Bluffdale hearing held April 25, 2007 had sixty people sign in. The Saratoga Springs meeting held April 26, 2007 had twenty-nine people sign in. Graphics were displayed that summarized the information presented in the EA. A summary matrix of impacts and mitigation measures of the roadway improvements as compared to the No-Build Alternative was presented on boards. Aerial photographs of the Preferred Alternative were displayed and project staff was available to answer questions. Comments received during the public comment period included support for the current roadway plan, need for noise walls in various locations, specific property impacts related to right-of-way acquisition, need for traffic signals, need to maintain farm access, and wildlife crossings.

CONCLUSION

This EA concludes that the project will not cause economic, social, or environmental impacts that cannot be mitigated.